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09/920,887	08/03/2001	Satoko Araki	520.40415X00	9820

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EXAMINER

BATURAY, ALICIA

ART UNIT PAPER NUMBER

2155

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/920,887

Applicant(s)

ARAKI ET AL.

Examiner

Alicia Baturay

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-15 is/are rejected.
- 7) ☒ Claim(s) 5-7, 10 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/920,887.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08032001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to the amendment filed 21 April 2005.
2. Claims 1-3 were cancelled.
3. Claims 4-15 were added.
4. Claims 4-15 are pending in this Office Action.

Response to Amendment

5. The objection to the specification regarding minor informalities was addressed and is withdrawn.
6. The objection to claims 1-3 is moot due to cancellation of aforementioned claims.
7. Applicant's amendments and arguments filed on 21 April 2005 have been fully considered but they are deemed to be moot in view of the new grounds of rejection.

Claim Objections

8. Claims 5-7 are objected to due to their dependence on cancelled claim 1. It is believed that Applicant intended to have claims 5-7 dependent upon claim 4. Appropriate correction is required.
9. Claims 10 and 14 are objected to because of the following informalities: Applicant states "...whereby specification of said MO for first and said MO for second network element..." It is believed Applicant meant to write, "...whereby specification of said MO for said first network element and said MO for second network element..." Appropriate correction is required.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4, 5, 7-9, 11-13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray ("Windows NT SNMP") and further in view of Singh et al. (U.S. 5,758,083).

Murray teaches the invention substantially as claimed including SNMP-based network management by a set of objects (Murray, page 4, "The Simple Protocol").

12. With respect to claim 4, Murray teaches a method for managing a network system via a Managed Object (MO) on network elements each of which is mutually connected (Murray, page 8, What is SNMP), the method comprising the steps of:

Inputting, by a system administrator, to a first network element connected to a graphical local craft terminal a system ID of a second network element under network management; inquiring, by the first network element, about an address corresponding to the system ID by sending a first Protocol Data Unit (PDU) including the system ID to other network elements (Murray, page 341, Identifying SNMP-managed nodes - the management application is run by a network manager using a management node connected to the network.); comparing, by the second network element, the system ID included in the first PDU with a system ID of the second network

Art Unit: 2155

element; sending, by the second network element, a second PDU including an address of the second network element to the first network element if the system ID included in the first PDU is consistent with the system ID of the second network element (Murray, page 341, Identifying SNMP-managed nodes); and sending, by the second network element, a fourth PDU including the address of the second network element to the first network element (Murray, page 341, Identifying SNMP-managed nodes).

Murray does not explicitly teach generating managed objects at each node for all other managed nodes.

However, Singh teaches generating, by the second network element, a MO for the first network element based on information included in the third PDU (Singh, col. 8, lines 57-63); and generating, by the first network element, a MO for the second network element based on information included in the fourth PDU (Singh, col. 5, lines 29-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to generate managed objects at each node for all other managed nodes. One would be motivated to do so in order to enable a network management system that allows for sharing of network management data between a plurality of distributed nodes.

Murray also does not explicitly teach a first network element sending another network element a PDU containing the address of the first network element.

However, Singh teaches sending, by the first network element, a third PDU including an address of the first network element to the second network element based on the address included in the second PDU (Singh, col. 8, lines 11-15).

Art Unit: 2155

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to enable a first network element to send another network element a PDU containing the address of the first network element. One would be motivated to do so in order to enable distributed network management.

13. With respect to claim 5, Murray teaches the invention described in claim 1, including a method for managing a network system where the fourth PDU includes a system ID of the second network element (Murray, page 341, Identifying SNMP-managed nodes).

Murray does not explicitly teach generating managed objects at each node for all other managed nodes.

However, Singh teaches a method where the third PDU includes a system ID of the first network element (Singh, col. 8, lines 11-15) and the second network element generates the MO for the first network element by using an address and a system ID included in the third PDU (Singh, col. 8, lines 57-63), and the first network element generates the MO for the second network element by using an address and a system ID included in the fourth PDU (Singh, col. 5, lines 29-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to enable a first network element to send another network element a PDU containing the address of the first network element. One would be motivated to do so in order to enable distributed network management.

Art Unit: 2155

14. With respect to claim 7, Murray teaches the invention described in claim 1, including a method for managing a network system where the first or second network element searches whether or not there is a MO corresponding to a network element which sends the third or fourth PDU when receiving the third or fourth PDU, generates a new MO if there is not, and generates a new MO after deleting existing object if there is, when an address managed by the existing object is different with the address included in the third or fourth PDU as a result of comparison (Murray, page 65-66, Four Simple Operations, Get and Set operations).

15. With respect to claim 8, Murray teaches a method for managing a network system via a Managed Object (MO) on network elements each of which is mutually connected (Murray, page 8, What is SNMP), the method comprising the steps of:

Inputting, by a system administrator, a first network element connected to a graphical local craft terminal a system ID of a second network element under network management; sending, by the first network element, a first Protocol Data Unit (PDU) for inquiring about a system ID to said second network element by using an input address (Murray, page 341, Identifying SNMP-managed nodes - the management application is run by a network manager using a management node connected to the network.); sending back, by the second network element, a second PDU including a system ID of the second network element to the first network element (Murray, page 341, Identifying SNMP-managed nodes); sending, by the second network element, a fourth PDU including the address of the second network element to the first network element (Murray, page 341, Identifying SNMP-managed nodes).

Murray does not explicitly teach generating managed objects at each node for all other managed nodes.

However, Singh teaches generating, by the second network element, a MO for the first network element based on information included in the third PDU (Singh, col. 8, lines 57-63); and generating, by the first network element, a MO for the second network element based on information included in the fourth PDU (Singh, col. 5, lines 29-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to generate managed objects at each node for all other managed nodes. One would be motivated to do so in order to enable a network management system that allows for sharing of network management data between a plurality of distributed nodes.

Murray also does not explicitly teach a first network element sending another network element a PDU containing the address of the first network element.

However, Singh teaches sending, by the first network element, a third PDU including an address of the first network element to the second network element based on the address included in the second PDU (Singh, col. 8, lines 11-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to enable a first network element to send another network element a PDU containing the address of the first network element. One would be motivated to do so in order to enable distributed network management.

Art Unit: 2155

16. With respect to claim 9, Murray teaches the invention described in claim 8, including a method for managing a network system where the fourth PDU includes a system ID of the second network element (Murray, page 341, Identifying SNMP-managed nodes).

Murray does not explicitly teach generating managed objects at each node for all other managed nodes.

However, Singh teaches a method where the third PDU includes a system ID of the first network element (Singh, col. 8, lines 11-15) and the second network element generates the MO for the first network element by using an address and a system ID included in the third PDU (Singh, col. 8, lines 57-63), and the first network element generates the MO for the second network element by using an address and a system ID included in the fourth PDU (Singh, col. 5, lines 29-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to enable a first network element to send another network element a PDU containing the address of the first network element. One would be motivated to do so in order to enable distributed network management.

17. With respect to claim 11, Murray teaches the invention described in claim 8, including a method for managing a network system where the first or second network element searches whether or not there is a MO corresponding to a network element which sends the third or fourth PDU when receiving the third or fourth PDU, generates a new MO if there is not, and generates a new MO after deleting existing object if there is, when an address managed by the existing

Art Unit: 2155

object is different with the address included in the third or fourth PDU as a result of comparison (Murray, page 65-66, Four Simple Operations, Get and Set operations).

18. With respect to claim 12, Murray teaches a system for managing a network system via a Managed Object (MO) on network elements each of which is mutually connected (Murray, page 8, What is SNMP), comprising:

A first network element connected to a graphical local craft terminal having a means to input a system ID and address; and a second network element managed by the graphical local craft terminal, where the first network element comprises: means to assemble a first PDU for inquiring about an address from a system ID or second PDU for inquiring about a system ID from an address, and send the first or second PDU to the second network element; and where the second network element comprises: means to send back an address of the second network element in accordance with the first PDU, and send back a system ID of the second network element in accordance with the second PDU; means to send a fourth PDU including information for generating a MO for the second network element (Murray, page 341, Identifying SNMP-managed nodes - the management application is run by a network manager using a management node connected to the network.).

Murray does not explicitly teach generating managed objects at each node for all other managed nodes.

However, Singh teaches means to generate a MO for the second network element using information included in the first PDU received from the second network element (Singh, col. 5,

Art Unit: 2155

lines 29-34), and means to generate a MO for the first network element by using information included in the third PDU received from the first network element (Singh, col. 8, lines 57-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to generate managed objects at each node for all other managed nodes. One would be motivated to do so in order to enable a network management system that allows for sharing of network management data between a plurality of distributed nodes.

19. With respect to claim 13, Murray teaches the invention described in claim 12, including a system for managing a network system where the fourth PDU includes a system ID of the second network element (Murray, page 341, Identifying SNMP-managed nodes).

Murray does not explicitly teach generating managed objects at each node for all other managed nodes.

However, Singh teaches a system where the third PDU includes a system ID of the first network element (Singh, col. 8, lines 11-15) and the second network element generates the MO for the first network element by using an address and a system ID included in the third PDU (Singh, col. 8, lines 57-63), and where the first network element generates the MO for the second network element by using an address and a system ID included in the fourth PDU (Singh, col. 5, lines 29-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to enable a first network element to send

Art Unit: 2155

another network element a PDU containing the address of the first network element. One would be motivated to do so in order to enable distributed network management.

20. With respect to claim 15, Murray teaches the invention described in claim 12, including a system for managing a network system where the first or second network element searches whether or not there is a MO corresponding to a network element which sends the third or fourth PDU when receiving the third or fourth PDU, generates a new MO if there is not, and generates a new MO after deleting existing object if there is, when an address managed by the existing object is different with the address included in the third or fourth PDU as a result of comparison (Murray, page 65-66, Four Simple Operations, Get and Set operations).

21. Claims 6, 10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray in view of Singh and further in view of Karau et al. (U.S. 6,473,502).

22. With respect to claim 6, the combination of Murray and Singh teaches the invention described in claim 1, including a method for managing a network system whereby specification of the MO for the first network element and the MO for the second network element are based on the specification of Open System Interconnection (OSI) (Murray, page 30, The OSI Reference Model).

The combination of Murray and Singh do not explicitly teach the use of NSAP or PSAP addresses.

Art Unit: 2155

However, Karau does teach a method for managing a network system where the address included in the second PDU is a Network Service Access Point (NSAP) Address, and the address included in the third and fourth PDU is a Presentation Service Access Point (PSAP) address (Karau, col. 27, lines 35-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Murray and Singh in view of Karou in order to facilitate network management support information that is updated on a real-time basis to insure accurate analysis and trouble shooting.

23. With respect to claim 10, the combination of Murray and Singh teaches the invention described in claim 8, including a method for managing a network system whereby specification of the MO for the first network element and the MO for the second network element are based on the specification of Open System Interconnection (OSI) (Murray, page 30, The OSI Reference Model).

The combination of Murray and Singh do not explicitly teach the use of NSAP or PSAP addresses.

However, Karau does teach a method for managing a network system where the address included in the second PDU is a Network Service Access Point (NSAP) Address, and the address included in the third and fourth PDU is a Presentation Service Access Point (PSAP) address (Karau, col. 27, lines 35-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Murray and Singh in view of Karou in order to facilitate

Art Unit: 2155

network management support information that is updated on a real-time basis to insure accurate analysis and trouble shooting.

24. With respect to claim 14, the combination of Murray and Singh teaches the invention described in claim 12, including a method for managing a network system whereby specification of the MO for the first network element and the MO for the second network element are based on the specification of Open System Interconnection (OSI) (Murray, page 30, The OSI Reference Model).

The combination of Murray and Singh do not explicitly teach the use of NSAP or PSAP addresses.

However, Karau does teach a method for managing a network system where the address included in the second PDU is a Network Service Access Point (NSAP) Address, and the address included in the third and fourth PDU is a Presentation Service Access Point (PSAP) address (Karau, col. 27, lines 35-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Murray and Singh in view of Karou in order to facilitate network management support information that is updated on a real-time basis to insure accurate analysis and trouble shooting.

Response to Arguments

25. Applicant's arguments filed 21 April 2005 have been fully considered, but they are not persuasive for the reasons set forth below.

26. ***Applicant Argues:*** Applicant states "The present invention is fundamentally different from Murray being that according to the present invention, the object thereof is to generate MOs and conduct managing operations using them. In Murray there is no process of getting information such as an address of another network system or device so as to generate MOs, as in the present invention."

In Response: The examiner respectfully submits that Murray does teach the process of getting information such as an address of another network system or device (the management application usually requests management data from the managed node, data commonly requested includes the network IP address) so as to generate MOs (the management application will send a GetRequest message to each active node, and if it receives a GetResponse message, the management application will log the node as supporting SNMP management – see Murray, page 341, "Identifying SNMP-managed nodes."), rendering the rejection proper and the rejection stands.

27. ***Applicant Argues:*** Applicant states "Contrary to the teachings of Singh, the present invention is related to generating a management object for managing each network element in a network system having a plurality of network elements. Information exchanged between network elements described in the amended claims is not related to an event or a change of state in a

Art Unit: 2155

network system, but instead is related to a necessary address or a system ID for generating a managed object as recited in the claims. Such features are clearly not taught or suggested by Singh. ”

In Response: In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The examiner respectfully submits that Murray teaches generating a management object for managing each network element in a network system having a plurality of network elements (the management application will send a GetRequest message to each active node, and if it receives a GetResponse message, the management application will log the node as supporting SNMP management– see Murray, page 341, “Identifying SNMP-managed nodes.”). Murray also teaches that information exchanged between network elements described in the amended claims is related to a necessary address (the network IP address) or a system ID (sysObjectID) for generating a managed object as recited in the claims (the management application will send a GetRequest message to each active node, and if it receives a GetResponse message, the management application will log the node as supporting SNMP management – see Murray, page 341, “Identifying SNMP-managed nodes.”), rendering the rejection proper and the rejection stands.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2155

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay
June 20, 2005


SALEH NAJJAR
PRIMARY EXAMINER